# Before the FEDERAL COMMUNICATIONS COMMISSION Washington, D.C. 20554



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Telephone Number Portability	)	CC Docket No. 95-116 RM 8535
In the Matter of	)	

COMMENTS OF AMERITECH

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## TABLE OF CONTENTS

		PAGE
I.	Introduction and Summary	1
II.	The Commission's Role	3
	<ul><li>A. Interoperability</li><li>B. Inter-Jurisdictional Cost Recovery</li></ul>	<b>4</b> 6
III.	Service Provider Portability	7
IV.	Service Portability	8
V.	Location Portability	9
VI.	Long-Term Platforms	10
VII.	Interim Services	12
VIII.	Non-Geographic Number Portability	13
	<ul><li>A. Policy and Market Issues</li><li>B. Technical Issues</li></ul>	13 14
IX.	Conclusion	16

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#### COMMENTS OF AMERITECH

Ameritech files its comments in the above-captioned matter, which addresses a number of topics of great significance to the development of number portability services across the entire telecommunications industry.

### I. Introduction and Summary

In this proceeding the Federal Communications Commission ("Commission") seeks to identify national issues involved in the implementation of number portability services. Ameritech submits that the Commission should take the lead in assuring transparent interoperatility between number portability services developed in various jurisdictions nationwide and by various providers. Ameritech also strongly endorses the Commission establishing criteria for the assignment and recovery of number portability costs between jurisdictions, and a decision making process that facilitates the prompt resolution of national number portability cost assignment and recovery issues.

Ameritech believes that number portability can provide important new customer services and conveniences, particularly in the emerging competitive marketplace. For that reason, Ameritech supports expeditious development and deployment of number portability services, as soon as technically and economically feasible. As a result, Ameritech has long been a leader, in both national industry forums and at the state level, in pursuing the development of number portability. In this regard, significant progress has recently been made in identifying potential technical platforms for service provider number portability in national forums and in the state of Illinois. The time is ripe for the Commission to address national issues arising from the implementation of number portability services.

In the NPRM, the Commission asks a number of questions concerning the various potential forms of number portability -- service provider, location and service. Ameritech strongly supports industry efforts to expeditiously develop service provider, location, and service number portability and their deployment by all service providers as soon as technically and economically feasible. Ameritech favors prompt deployment of a long-term number portability platform that fully meet the following long-term criteria:

- 1. accommodates all three forms of number portability,
- 2. supports a robust set of service and feature capabilities,
- conserves Number Plan Area ("NPA") codes and telephone numbers,
- 4. supports expected demand with no service degradation,

- 5. supports all forms of calls,
- 6. results in no loss of feature functionality,
- 7. provides maximum flexibility to carriers, and
- 8. is cost effective.

At this time it does not appear that selection of a single national number portability platform is required to achieve transparent communication capabilities between services. In addition, it is not clear at this early date that any one number portability architecture will best meet the unique network and consumer needs in each state. For these reasons, Ameritech opposes selection of one mandated number portability architecture at this time, and believes that the industry should work cooperatively with state regulators in each jurisdiction to select the platform that "best" meets the needs of that state, consistent with a national policy framework addressing interoperability.

The Commission should separate the issues inherent in portability for non-geographic telephone numbers into an entirely separate proceeding.

Given the unproven demand and uncertain consumer benefits related to these services, delaying consideration of the other topics in the NPRM while non-geographic number portability is reviewed is not advisable.

#### II. The Commission's Role

The Commission should focus upon the key national policy issues involved in the development and deployment of number portability. The

major categories of issues presented by the Notice of Proposed Rule Making<sup>1</sup> that Ameritech believes this Commission should address are (1) nationwide interoperability of number portability between all jurisdictions and providers; and (2) inter-jurisdictional cost assignment and recovery, including a decision making process for inter-jurisdictional cost recovery issues.

#### A. Interoperability

Ameritech believes that the actual development and implementation of specific number portability services should be done by the industry through cooperative efforts of all affected providers and state regulators. Number portability often relates specifically to local exchange services or functions, and in those cases should be developed and implemented locally based upon available technologies and service designs that best fits the network of local providers and best meets the needs of local customers. The Commission can facilitate this process by providing a national framework for service compatibility and by facilitating the industry's development of detailed interconnection and interface specifications. In cases where number portability relates specifically to an interstate service, such as was the case with 800, the Commission should assume the active role of overseeing its deployment by the industry.

The Commission should establish a federal framework for national technical interoperability and interconnection aspects of number portability.

<sup>&</sup>lt;sup>1</sup> In the Matter of Telephone Number Portability, CC Docket No. 95-116, RM -8538, Notice of Proposed Rule Making (hereinafter "NPRM"), released July 13, 1995.

This framework would then be used to develop local technical solutions and services by the industry. The industry would, in turn, refer any significant unresolved policy issues requiring regulatory intervention to state regulators or the Commission as appropriate. This arrangement would properly provide oversight and direction without involving the Commission and state regulators in the details of these activities.

Ameritech recommends that the Commission establish the policy that all number portability platforms of all providers nationwide must be compatible and the framework for such compatibility. The Commission should then refer the matter to the Industry Numbering Committee ("INC") for expeditious development of specific technical details. The Commission should instruct the INC to report its progress back to the Commission within six months.

The Commission should avoid the temptation to rush in and choose the alleged "best available" technical solution from among the technical alternatives presented in the NPRM. No single national platform may be required to achieve national interoperability, nor is it clear that any one technical arrangement will best meet the varying local circumstances of providers in each jurisdiction. This NPRM is neither well-suited, nor an appropriate choice of forum for sifting through the myriad of technical detail and cross-industry issues involved in analyzing and selecting the most appropriate technical platform for each state. Rather, this NPRM is the most appropriate forum for identifying the key national policy and for expediting

the widespread availability and implementation of number portability services nationwide that provide efficient and transparent interoperability between all jurisdictions and carriers.

#### B. Inter-Jurisdictional Cost Recovery

Ameritech believes that the Commission should develop in this proceeding principles for inter-jurisdictional cost assignment and recovery and then delegate the implementation of those principles to a joint federal-state board. A carefully targeted board, time-limited and task-specific could prove to be an invaluable overall steering mechanism for the synchronization of cost recovery issues. However, such a board should be narrowly focused with expedited deadlines so that it does not delay deployment of number portability services as soon as they are technically and economically feasible.

Ameritech recommends that the Commission adopt the following cost recovery principles to guide such a board:

- 1. Providers of number portability should recover all costs incremental to the provision of the service, plus a reasonable allocation of joint and common costs.
- 2. The cost-causers, or more appropriately, the parties who would most benefit from the deployment of number portability, should bear the costs of the service.

- 3. Cost recovery structures should give carriers and end-user customers the proper incentives to act efficiently. In other words, relative charges should be set in a manner which discourages abuse or inefficiency.
- 4. Consistent with principles 1-3, costs should be assigned between jurisdictions and to users based upon a mechanism that rationally assigns costs to the cost causers, without creating cross-subsidies.
- 5. The board should establish procedural timelines that facilitate the expeditious resolution of cost recovery issues within six months or less, so that number portability can be deployed as soon as technically and economically feasible.

#### III. Service Provider Portability

The availability of service provider portability (i.e., customers ability to retain their existing telephone number while switching local exchange service providers) is considered by some carriers who are entering the local exchange business to be critical to their competitive efforts, and portray "true" number portability as an absolute requirement to the development of a competitive marketplace.<sup>2</sup> However, Ameritech does not agree that lack of full long-term number portability is a barrier to competition. Dr. David Teece, a noted economist, demonstrated in his The Ameritech Plan in Context: Supplemental Paper that from an economic prospective, the lack of complete number portability will not impair the normal functioning of the

<sup>&</sup>lt;sup>2</sup> See, fn 26 of the NPRM.

competitive marketplace.<sup>3</sup> While Ameritech agrees that number portability facilitates freedom of choice and competition, it also believes that customer resistance to changing telephone numbers can and is being overcome through price, service and quality considerations and effective marketing techniques. If this were not true, prospective marketplace entrants would not be flocking to apply for state certification in Illinois and Michigan.

#### IV. Service Portability

The concept of service portability (i.e., the portability of a subscriber's telephone number when changing from one type of service to another) does not involve alleged issues of competitive equity, as does service provider portability. Thus, the need for the direct involvement of regulators in the formulation of policy and implementation of details is not as great as it is for service provider portability. Nonetheless, to the extent that the technical interoperability standards and inter-jurisdictional cost recovery principles are developed for service provider number portability, they may also facilitate service portability. The Commission should consider, within its overall framework and criterion development, whether a requirement that interoperability and cost recovery standards developed for service provider number portability apply to service portability, as appropriate.

<sup>&</sup>lt;sup>3</sup> See, <u>In the Matter of a Petition for a Declaratory Ruling and Detailed Waivers to Establish a New Regulatory Model for the Ameritech Region</u>, ("Customers First Proceeding"), Ameritech Reply Comments, filed July 12, 1993, at pp. 15-17 and Attachment J at § 2.2.

#### V. Location Portability

Ameritech believes that location portability can be a valuable customer convenience that will enable customers to move from one location to another without incurring the inconvenience of a telephone number change. For that reason, Ameritech supports development of location number portability options where they are technically and economically feasible. Ameritech also believes that where location number portability service is provided, the service should be available on nondiscriminatory terms whether or not the customer is changing service providers.

As to the appropriate geographic scope for location portability, the NPA is the best initial choice for the industry's efforts at this time. The main reason for this choice is that using an NPA framework will simplify implementation of location number portability. For example, the significant time and expense of switch software development efforts necessary to provide local portability would be minimized, since NPAs are already the basis for much of the internal operating system run by most switching equipment in the existing public switched network. Likewise, on the level of the cross-industry efforts required to develop the regulatory framework for location number portability's evolution, the separations and federal/state preemption issues presented will be significantly simplified by using an NPA structure. NPA-based location portability also affords the best balance between the desire for location number portability and the maintenance of geographic significance of telephone numbers. Customers desiring a broader scope

initially, will have the ability to subscribe to non-geographic services, such as 500.

#### VI. Long-Term Platforms

In this NPRM, the Commission seeks comment on "what longer-term number portability solution is in the public interest." It further requested comment on the various proposals that have been offered and on various specific issues relating to portability.

As stated earlier, Ameritech believes the selection of specific architectures, standards and performance requirements are best left to industry organizations and standards bodies with timely policy guidance from state and federal regulators. But, the Commission should play an important role is assisting those efforts by establishing basic policy frameworks and by encouraging prompt consideration and approval of the standards and technical details by all industry participants. Thus, Ameritech's comments will focus on the proper criteria to be used in evaluating technical portability proposals, as opposed to detailed comments on any one proposal.

First, any long-term number portability platform should support all forms of number portability (i.e., service provider, service, and location) to ensure maximum flexibility for carriers and maximum benefit for end users. To do otherwise, would impose inappropriate burdens on carrier network operations and potentially unnecessary costs on end users.

Second, any long-term number portability platform should support a robust set of capabilities without negatively impacting existing and planned services and features. As noted by the Commission, support of operator services and enhanced 911 services is a priority due to their public safety aspects. Ameritech agrees this is a key requirement for any number portability platform.

Third, with the introduction of new wireless services and of local competition, the consumption of central office codes and in turn NPAs has accelerated significantly. In responding to the Commission's policy framework, the industry should seek number portability alternatives that efficiently utilize North American Numbering Plan (NANP) numbers and codes. Only those platforms that uniquely identify the terminating switch offer the potential for central office code sharing. Platforms that only identify the terminating carrier cannot facilitate such sharing. Likewise, solutions which may lead to conflicts with in-use NPAs or accelerate the exhaust of assignable NPAs should be avoided.

Fourth, with regard to data base queries, Ameritech believes that launching queries from the originating service provider's network will be essential to providing a fully-robust number portability environment. In any data base query scenario, the potential for service degradation (e.g., call setup delay) exists. Therefore, Ameritech believes any number portability platform must route calls in the most direct manner and with the least number of data base queries. While Ameritech believes that third party data base

administration is appropriate, carrier ownership of downstream routing data bases may be warranted. A role for the third-party administrator would be to ensure compatibility among such data bases.

Fifth, the selected number portability architecture should work with all types of calls and support the proper rating of each call type without necessitating significant modifications of existing billing and operations support systems.

Sixth, any chosen number portability platform will require significant software development and carriers will incur significant deployment expense. It is essential that carriers and states be extended the maximum flexibility in choosing network architectures and service designs most appropriate for their local networks in each state, as long as they meet compatibility requirements.

#### VII. Interim Services

The main objective for interim number portability options is to provide short-term service provider number portability capabilities until a long-term platform can be developed and implemented. For that reason, Ameritech submits that interim measures should be implemented where technically feasible that provide reasonably priced service provider portability with a minimum loss of functionality consistent with existing technology and facility capabilities. However, since these services are interim in nature, excessive costs and double deployment of new equipment, facilities and software should be avoided.

Consistent with these principles, Ameritech has deployed interim service number portability services using remote call forwarding technology and direct inward dialing in both Michigan and Illinois in conjunction with its Customers First Plan. Ameritech is also exploring with an alternate exchange carrier, a potential enhancement to its interim number portability offerings using SPNPP-Direct with SS7 signaling. These efforts are on-going.

#### VIII. Non-Geographic Number Portability

#### A. Policy and Market Issues

The Commission has correctly separated the issues of portability surrounding non-geographic numbers from the other issues being considered in this proceeding. Ameritech agrees that the competitive, marketplace, and technical issues differ regarding non-geographic number portability and thus warrant a separate proceeding.

Ameritech supports in concept the Commission's tentative conclusion that "service provider portability for 900 and 500 numbers is beneficial for (end user) customers of those services." However, until such benefits are translated into demand and willingness to pay, non-geographic portability should not be mandated. In moving forward with portability of non-geographic numbers, the Commission should not assume the same public interest exists across all non-geographic services.

Any mandatory implementation would add significant costs to the carrier investments that may far out-weigh the benefits of the service. With

regard to 900 services, Ameritech has not had a single carrier express interest in a such a number portability offering, nor is it aware of any evidence that service provider portability would increase demand for these services. Given the continued public policy issues surrounding 900 services generally and the reduced demand in the Ameritech region, Ameritech questions the advisability of mandating this form of portability at this time.

Likewise, while 500 services are in their developmental stages and not as mature as 900, the demand for this form of number portability from carriers or end users has not manifested itself. In Ameritech's view, 500 portability should be treated as a new service offering by the Commission. As such, carriers should recover the costs of providing this portability from users of the service. Given the limited traffic from such an infant service and significant start up costs, it does not appear number portability would stimulate demand and the potential exists for it to depress demand.

#### B. Technical Issues

In addition to seeking input regarding the market and policy issues associated with 500/900 portability, the NPRM requests comment on various technical issues. Specifically, the Commission requests input as to whether it is technically possible and cost effective to use the same data base method or data base to provide service provider portability for both geographic and non-geographic numbers, and whether, similarly, it is technically possible to use the same data base for multiple types of non-geographic numbers (e.g., 500 and 900).

Portability applications for both geographic and non-geographic numbers are not equivalent. While there are similarities between the services and a common underlying architecture could be used, each form of portability has unique functions. The information required to be stored in a data base is different for each application. For example, the data required to be retrieved in response to a query could be a geographic destination address, a Carrier Identification Code ("CIC"), or an SS7 Point Code depending on the type of portability service. Given that these services are currently functionally different, Ameritech envisions that each will be developed as separate service applications, and that it may be preferable to use separate data bases due to capacity, survivability, and cost impacts.

Regarding the feasibility of upgrading the existing 800 platform to support 900 portability, Ameritech does not believe it to be practical. While such an upgrade is technically possible, it would require extensive modifications to the 800 platform. Modifications would be required to the SMS, SCP, and SSP. Given the capacity limitations of the 800 platform and the extensive modifications required, Ameritech has not investigated the costs of such an upgrade.

Similarly, Ameritech does not believe it is technically or economically feasible to provide PCS N00 portability in a switch-based translation environment. Such an approach would have serious shortcomings due to the memory capacity limitations and due to the operational issues associated

with updating the routing tables. Only external data base approaches should be considered.

Ameritech recommends that until such time as real demand exists for non-geographic portability, it should not be mandated. Ameritech agrees with the Commission that the unique competitive market, and technical issues require separate proceedings to establish the public interest of non-geographic portability generally.

#### IX. Conclusion

For the reasons stated above, Ameritech recommends that the Commission develop a framework for nationwide transparent interoperability between number portability services of all providers. The Commission should also establish basic principles for assignment and recovery of number portability between jurisdictions, and establish a joint board-like body to expeditiously implement those principles.

The Commission should not mandate any specific platform or architecture for service providers, location or service number portability at this time. It should rather permit the industry to develop the "best" alternatives under the oversight of state or federal regulatory agencies, as appropriate. The Commission should establish basic criteria that the industry would consider in selecting any specific number portability platform or architecture.

Ameritech continues to believe that until such time as real demand exists for non-geographic portability, it should not be mandated. Ameritech believes that the unique competitive market and technical issues require separate proceedings to establish the public interest of non-geographic portability generally.

Respectfully submitted,

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